## IN BUILT DC CHARGER

Congratulations on your purchase of the Thumper In Built DC Charger Battery Pack. This system has been designed with an 'easy to use' approach to installing a dual battery system. The Thumper In line DC Battery Pack is suited for the use in ANY vehicle, regardless of the make, model, or year of manufacture.

## The DC Charger:

This particular Thumper pack is fitted internally with a solid state DC DC In vehicle battery charger. The charger is designed to convert the low voltage output from the vehicle's alternator (min 11.5V) to a voltage of 13.8V - 14.0V.

The DC Charger is fitted internally within the case of the Thumper pack. It is pre-set and fully automatic in its charging. The DC Charger does not require any modifications to its settings at any stage. Rated to 20 Amps, it is internally protected by the use of automatic reset circuit breakers.

For your convenience, the DC Charger is wired to a designated 50 Amp Anderson connector (mounted externally on the lid), labelled 'ALTERNATOR INPUT'. The 'Alternator Input' connection will provide zero voltage when not in use. This connection has been designed soley for the use of vehicle charging and will not allow use with any other charging source (such as solar or 240 Volt.) The Anderson will not provide power for running any accessories.



There is no override / ignition lead required to be fitted to this Thumper pack as it has been designed to operate within ANY vehicle.

The DC Charger is a solid state voltage booster for vehicle charging. It does not include a vehicle isolator, nor does it include a solar regulator for solar panel connections. (Thumper do offer a number of units with these features, please check out other listings for more information.)

The DC Charger wil produce a low level of heat when charging at full load. Due to the location internally of the DC Charger, the heat can sometimes be felt through the lid of the Thumper, however, this is minimal and will not affect the operation of the Thumper pack.

The Thumper In Built DC Battery Pack is designed to be used in conjunction with a battery isolator when charging in the vehicle. Thumper provide the TUR-L wiring loom with purchase.

As there is no isolator component in the DC Charger, the Thumper pack will remain connected to the vehicle start battery if the TUR-L wiring loom is not fitted / or no other isolator is used.

The TUR-L is designed to provide the installer with everything required to complete the install to any vehicle, regardless of make, model or year of manufacture. The TUR-L can be modified to suit 24 Volt vehicles by exchanging the relay mount.

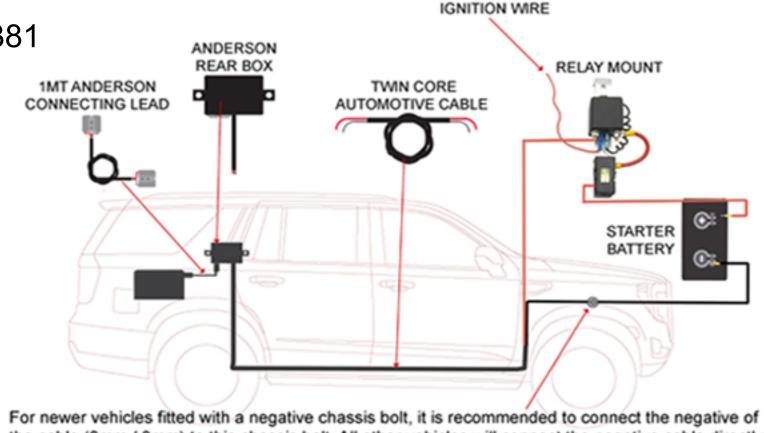
## How to use the DC charger:

- Install the TUR-L wiring loom (or equivalent isolated charging line) in the vehicle.
- Connect the charge line from the vehicle to the Anderson connector labelled 'Alternator Input'.
- The Thumper will begin to charge immediately when the vehicle's ignition has been switched ON.
- When the vehicle's ignition is OFF, the Thumper will only isolate from the main start battery if the TUR-L has been fitted, or an equivalent isolator).
- The Thumper voltage will reach a max of 14.1 14.2 Volts when charging via the 'Alternator Input' connection.

For additional information please contact direct on 08 8398 5381

The TUR-L wiring loom and instructions (also available for download)





For newer vehicles fitted with a negative chassis bolt, it is recommended to connect the negative of the cable (6mm / 8mm) to this chassis bolt. All other vehicles will connect the negative cable directly to the negative terminal of the main start battery.